WHAT IS CLAIMED IS:

1. A network conductor having an irregular network structure with as thin lines as 10 nm to 10 μm.

2. A substrate having a network conductor formed thereon, said network conductor being recited in claim 1.

3. The network conductor-having substrate of claim 2, comprising an underlayer between said substrate and said network conductor.

4. An organic electroluminescence device comprising at least one network conductor-having substrate recited in claim 2 and an organic electroluminescence layer between a positive electrode and a negative electrode, wherein said network conductor constitutes said positive electrode and/or said negative electrode.

5. The organic electroluminescence device of claim 4, wherein said network conductor is covered with a conductive polymer layer.

6. A method for producing a network conductor comprising forming a thin film on a substrate; generating microcracks in a network manner in said thin film; and filling said microcracks with a conductive material.

7. A method for producing a network conductor comprising forming an underlayer on a substrate; forming a thin film on said underlayer, generating microcracks in a network manner in said thin film; activating portions of said underlayer exposed to said microcracks; removing said thin film; and forming a layer of a conductive material only on the activated portions of said underlayer.

8. The method of claim 6, wherein said thin film is (1) a sol-gel film obtained by applying a sol-gel liquid, (2) a fine particle film obtained by applying a fine particles-containing liquid, or (3) a vapor deposition film obtained by depositing a vaporized thin film-forming material; and wherein said microcracks are generated by drying said sol-gel film or said

fine particle film, or by causing stress to be stored in said vapor deposition film during its growth.

9. The method of claim 7, wherein said thin film is (1) a sol-gel film obtained by applying a sol-gel liquid, (2) a fine particle film obtained by applying a fine particles-containing liquid, or (3) a vapor deposition film obtained by depositing a vaporized thin film-forming material; and wherein said microcracks are generated by drying said sol-gel film or said fine particle film, or by causing stress to be stored in said vapor deposition film during its growth.

10. The method of claim 6, comprising forming said thin film after forming an underlayer by a plating method on said substrate, and forming said conductive material layer by a plating method on portions of said plated underlayer exposed to said microcracks.

11. The method of claim 7, comprising forming said thin film after forming an underlayer by a plating method on said substrate, activating portions of said plated underlayer exposed to said microcracks, and forming said conductive material layer by a plating method on the activated portions of said plated underlayer.

12. The method of claim 10, wherein said plating method is an electroless plating method; and wherein said plated underlayer comprises a plating catalyst or a catalyst precursor.

13. The method of claim 11, wherein said plating method is an electroless plating method; and wherein said plated underlayer comprises a plating catalyst or a catalyst precursor.

14. The method of claim 6, comprising forming said thin film after forming a bondable underlayer having bondability to said conductive material or acquiring bondability to said conductive material by activation on said substrate, and bonding particles of said conductive material to

portions of said bondable underlayer exposed to said microcracks.

15. The method of claim 7, comprising forming said thin film after forming a bondable underlayer having bondability to said conductive material or acquiring bondability to said conductive material by activation on said substrate, activating portions of said bondable underlayer exposed to said microcracks, and bonding particles of said conductive material to the activated portions of said bondable underlayer.

16. The method of claim 14, wherein said bondable underlayer has a functional group bondable to said conductive material or a functional group acquiring bondability to said conductive material by activation.

17. The method of claim 15, wherein said bondable underlayer has a functional group bondable to said conductive material or a functional group acquiring bondability to said conductive material by activation.